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EXAMINER

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

This Action is in response to communications filed 2/16/10.

Claims 1, 10-12, 16 and 18-21 are pending in this application.

Claims 8-9 were previously withdrawn.

Claims 3-6 and 13-15 were cancelled in the communications filed 9/23/09.

Claims 2, 7 and 17 are cancelled in communications filed 2/16/10.

Response to Arguments

Applicant's arguments filed on 11/25/09 and 2/16/10 have been fully considered but they are not persuasive.

In the communications filed, applicant argues in substance that:

a. Lindsay does not disclose denying (please note “denying” was changed in the supplemental amendments filed on 2/16/10 to “terminating”) a request to establish a connection between the mobile terminal and an external device responsive to receiving the signaling message and detecting a parameter in the spare field (remarks, pg. 8).

In response to argument [a], Examiner respectfully disagrees.

The currently amended independent claim 1 recites in part:

“...responsive to receiving the request and detecting the parameter in the spare field, terminating the request to establish the connection between the mobile terminal and the external device...”

The specification in support for the recited limitation discloses:

“...According to a first essential characteristic of the invention, the microprocessor 7 uses one of the spare fields of a signaling message, prior to transmission, to place the user message in it. In the invention, the control message that is transmitted and that contains the user message is a special message. **The special message is a signaling message in**

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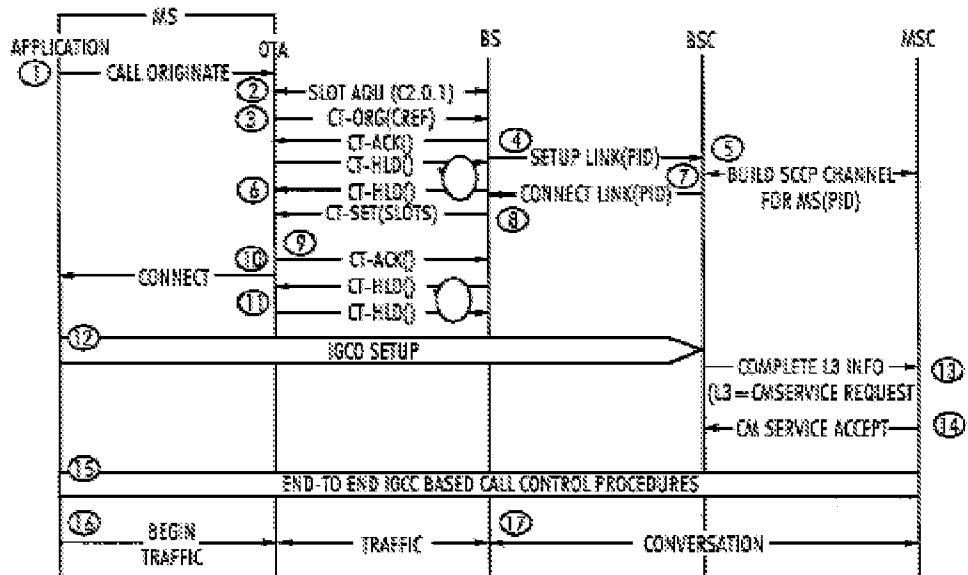
which a value of a parameter makes it possible to indicate to the called party, when said called party receives it, that a message is to be found in the field that is normally spare. To achieve this, it is possible to use a predefined value which indicates that the call protocol is known to the caller and to the called party. As a result, when the called party receives a signaling message containing such a parameter, then said called party knows where the user message is to be found. However, it is quite possible to produce a new value in addition to the predefined values and that would achieve the same result. Thus, the center 13 in turn transmits a signaling message which contains a reply to the user message/ e.g. whether, as a function of the identifier transmitted with the user message, the authentication of the card 12 is positive or negative.

According to a second essential characteristic of the invention, the microprocessor 7 causes the call set-up to terminate once the message 4 has been received by the called party and/or once a reply to the message 4 has been received by the caller. That is to say that, if the telephone 1 transmits a message 4 and does not await a reply *from the center 13*, then said center can terminate call set-up. If, however, a reply is awaited by the telephone 1 (since, in this example said telephone is the transmitter of the user message), then it is the telephone that must terminate call set-up. *In this...*

In other words, the called party can receive the signaling message/request, detect the parameter to see where the user message is to be found and may terminate the call set-up.

Lindsay discloses the process of receiving and activating a request to set up a call channel, i.e. a connection, by performing a signaling stage including sending the signaling message and terminating the set up of the call channel at any time by the user and/or by the base station in response to an event, as evidenced by the following figure.

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**Fig. 9**

MOBILE CALL ORIGINATION

In other words, the application at the mobile station originates the call set-up procedure by initiating the call originate request.

The "call originate" request (col. 20 L41 to col. 21 L12) comprises:

TABLE 10-4

<u>Call Origination (CT-ORG)</u>	
Information Element	Length in Bits
Message Type	8
Service Request	32
Key Sequence Number	8
Class	16
CRCF	8
Reserved	56

The user station 102 sends a Call Originate (CT-ORG) control traffic message to the base station 104 to request the placement of an outgoing call.

The Service Request information element of the CT-ORG message indicates such things as data versus voice service, use of CRC and ARQ, symmetry or asymmetry of the channel, whether service resources are being requested, and frame rate, for example. The Key Sequence Number information element is used to generate a communication key in both the base station 104 and the user station 102 without having to explicitly pass the key over the air. The Class information element specifies some of the operational parameters of the particular type of user station 102. The Class information element can be broken down into sub-fields of Class Type and Class Information. The Class Type

In other words, the call request message includes various user messages such as service request information comprising data versus voice service, CRC, ARQ, service resources requested, frame rate, etc.

Lindsay also discloses releasing control traffic message for releasing the connection in progress **or during link setup process**. In releasing the connection in progress or during link set-up, **the cause information element for the CT-REL message indicates whether the release was initiated by the network or whether an authentication rejection occurred, e.g. col. 24 L30-50.**

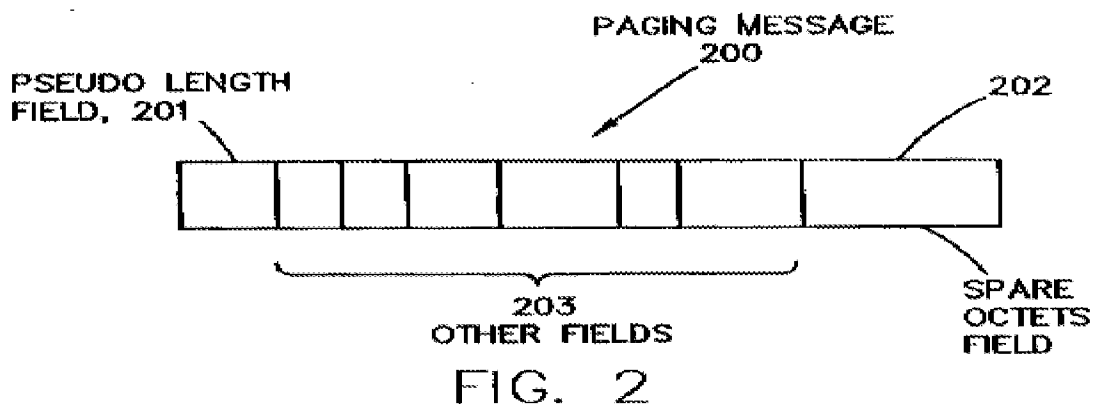
Stated another way, the call set-up and/or link set-up procedure can be released, terminated and/or discontinued **responsive to the event such as authentication rejection.**

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As such, the system is configured to terminate and/or discontinue the call or link set-up procedure responsive to sending the initial call set-up message and in response to occurrence of the authentication rejection at the base station.

However, Lindsay does not disclose placing the user information in a spare field of a signaling message and the process of detecting the parameter in the spare field.

Ranta explicitly discovered and/or invented the usage of spare fields in the signaling messages for transmitting the information therein, as evidenced by the following figure.



Ranta further discloses the process of transmitting the information on this spare octet field, e.g. col. 2 L41-58.

Ranta also discloses including a parameter such as identifiers in the paging message so that the terminals can detect and know about the information contained in the spare field, e.g. col. 4 L10-67, col. 6 L29-55.

Accordingly, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lindsay in view of Ranta in order to send the user information/message originating at a mobile terminal in the spare field of the paging message, i.e. signaling message, to the external device, wherein the external device would detect the

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identifier so that the external device knows about the information contained in the spare octet field of the paging message and further terminate the call set-up procedure by sending a call-release message since it is well known in the art to combine the prior art elements and/or apply the known techniques to the known devices.

The rationale to support a conclusion that the claim would have been obvious is that a particular known technique was recognized as part of the ordinary capabilities of one skilled in the art. One of ordinary skill in the art would have been capable of applying this known technique to a known device (method, or product) that was ready for improvement and the results would have been predictable to one of ordinary skill in the art.

The rationale supporting the combination can be found in See KSR International Co. v. Teleflex Inc., 550 U.S. ___, ___, 82 USPQ2d 1385, 1395-97 (2007) identified a number of rationales to support a conclusion of obviousness which are consistent with the proper “functional approach” to the determination of obviousness as laid down in Graham. The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in KSR noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit, and **MPEP 2143**. [

EXEMPLARY RATIONALES:

Exemplary rationales that may support a conclusion of obviousness include:

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) “Obvious to try” – choosing from a finite number of identified, predictable;
- (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art;
- (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. See MPEP §

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2143 for a discussion of the rationales listed above along with examples illustrating how the cited rationales may be used to support a finding of obviousness].

b. Further, Lindsay does not disclose the process of discontinuing an attempt to establish the connection between the mobile terminal and the external device responsive to receiving a reply message indicating that the signaling message was successfully received by the external device (remarks, pg. 10).

In response to argument [b], Examiner respectfully disagrees.

The specification in support for the recited limitation discloses:

“...According to a second essential characteristic of the invention, the microprocessor 7 causes the call set-up to terminate once the message 4 has been received by the called party and/or once a reply to the message 4 has been received by the caller. That is to say that, if the telephone 1 transmits a message 4 and does not await a reply *from* the *center* 13, then said center can terminate call set-up. **If, however, a reply is awaited by the telephone 1 (since, in this example said telephone is the transmitter of the user message), then it is the telephone that must terminate call set-up. In this...**”

In other words, in this case, it is the mobile terminal that terminates the call set-up procedure after receiving the reply message such as acknowledgement message usually indicating the successfully receiving the message or request.

Lindsay teaches the process of receiving a reply message such as ACK message from the external device in response to transmitted signaling message, e.g. col. 19 L33-57, col. 26 L1-30, and discontinuing the attempt to establish the call/connection between the two parties by terminating and/or releasing the connection in progress or during link-set up.

Ranta explicitly discovered and/or invented the usage of spare fields in the signaling messages for transmitting the information therein, as set forth above.

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Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lindsay in view of Ranta in order to transmit the user message on the spare octet and discontinue the attempt to establish the connection by sending a call release message during or prior to call establishment.

The rationale to support a conclusion that the claim would have been obvious is set forth above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1, 10-11, 16, 18-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay et al. (hereinafter Lindsay, US 6,301,242 B1) in view of Ranta (U. S. Patent No. 6,775,259 B1).

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As per claim 1, Lindsay discloses a method of receiving signaling messages through a transmission network (fig. 1-2), comprising:

- receiving, in a mobile terminal, a request to establish a connection between the mobile terminal and an external device through a transmission network, the request including data field that initially includes data and spare field that initially does not include data (col. 17 L11-30: spare field, col. 18 L30-67, col. 20 L41 to col. 21 L12: Call origination request, col. 25 L62 to col. 26 L30, col. 24 L1-49, fig. 9 item #1);
- transmitting the request, i.e. signaling message, to the external device (col. 18 L30-67, col. 20 L41 to col. 21 L12, col. 25 L62 to col. 26 L30, col. 24 L1-49, fig. 9 item #1); and
- responsive to receiving the request, terminating the request to establish the connection between the mobile terminal and the external device before the connection is established (col. 24 L30-50: releasing the connection in progress or during link set-up in response to network or authentication rejection occurrence, col. 27 L36 to col. 28 L26, col. 30 L66 to col. 31 L24: terminating the call during and/or prior of the establishment of the call channel).

However, Lindsay does not disclose a user message (i.e. information) disposed in a spare field of a request, including the user message placed in the spare field that initially does not include data, a parameter that indicates that the user message has been placed in the spare field and the process of detecting the parameter in the spare field.

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Ranta explicitly discloses placing information in a spare field of a signaling message for setting up the channel (note according to applicant specification, page 4, lines 15-24: the invention utilizes GSM standard 04.18) the signaling message includes an identifier (a parameter) to indicate the presence of said spare field and communicating the user message (col. 2 L41-58, col. 3 L63 to col. 4 L67, col. 5 L49-67, fig. 2) and the process of detecting the parameter in the spare field (col. 4 L10-31: identifiers, col. 6 L29-55).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lindsay in view of Ranta (hereinafter Lindsay-Ranta) in order to place information and/or user message in a spare field of signaling message and a parameter and terminate the set-up of the call channel once the user message has been communicated.

One of ordinary skilled in the art would have been motivated because it would have allowed the system to transmit information in an unoccupied part(s) of the signaling message, thus conserving bandwidth (Ranta: col. 2 L13-25).

As per claim 10, Lindsay discloses a method of sending signaling messages through a transmission network (fig. 1-2), comprising:

- generating, in a mobile terminal, a signaling message as part of an attempt to establish a connection between the mobile terminal and an external device through a transmission network, the signaling message including data field that initially includes data and spare field that initially does not include data (col. 17 L11-30: spare field, col. 18 L30-67, col. 20 L41 to col. 21 L12: Call origination request, col. 25 L62 to col. 26 L30, col. 24 L1-49, fig. 9 item #1);

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- transmitting the signaling message to the external device (col. 18 L30-67, col. 20 L41 to col. 21 L12, col. 25 L62 to col. 26 L30, col. 24 L1-49, fig. 9 item #1);
- receiving a reply message from the external device in reply to the transmitted signaling message, the reply message indicating that the signaling message was successfully received by the external device (col. 19 L33-57: ACK message, col. 26 L1-30: ACK messages); and
- responsive to receiving the reply message indicating that the signaling message was successfully received by the external device, terminating the attempt to establish the connection between the mobile terminal and the external device before the connection is established (col. 24 L30-50: releasing the connection in progress or during link set-up in response to network or authentication rejection occurrence, col. 27 L36 to col. 28 L26, col. 30 L66 to col. 31 L24: terminating the call during and/or prior of the establishment of the call channel).

However, Lindsay does not disclose the process of placing a user message (i.e. information) in a spare field of a generated signaling message, including the user message placed in the spare field that initially does not include data, a parameter that indicates that the user message has been placed in the spare field.

Ranta explicitly discloses placing information in a spare field of a signaling message for setting up the channel (note according to applicant specification, page 4, lines 15-24: the invention utilizes GSM standard 04.18) the signaling message includes an identifier (a parameter) to indicate the presence of said spare field and communicating the user message (col. 2 L41-58, col. 3 L63 to col. 4 L67, col. 5 L49-67, fig. 2).

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Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lindsay in view of Ranta (hereinafter Lindsay-Ranta) in order to place information and/or user message in a spare field of signaling message and terminate the set-up of the call channel once the user message has been communicated.

One of ordinary skilled in the art would have been motivated because it would have allowed the system to transmit information in an unoccupied part(s) of the signaling message (Ranta: col. 2 L13-25).

As per claim 11, Lindsay-Ranta discloses the method further comprising storing the reply message in a dedicated memory of the mobile terminal (Lindsay: col. 9 L56 to col. 10 L10; Ranta: col. 6 L3-28).

As per claim 16, Lindsay-Ranta discloses the method further comprising enciphering the user message (i.e. encrypting, Lindsay: col. 20 L1-40).

As per claim 18, Lindsay-Ranta discloses the method wherein generating the signaling message further comprises generating one of a control message and a message for monitoring a plurality of signaling stages included in the attempt to establish the connection between the mobile terminal and the external device (col. 18 L30-67, col. 20 L41 to col. 21 L12: Call origination request, col. 25 L62 to col. 26 L30, col. 24 L1-49, fig. 9 item #1).

As per claim 19, Lindsay-Ranta discloses the method wherein the reply message is an acknowledgement message (Lindsay: col. 19 L33-57: ACK message, col. 26 L1-30: ACK messages).

As per claim 21, Lindsay-Ranta discloses the method of claim 10 as set forth above.

However, Lindsay does not disclose wherein the reply message is received in a spare field in a reply signaling message as part of the attempt to establish the connection between the mobile terminal and the external device through the transmission network.

Ranta explicitly discloses placing information in a spare field of a signaling message for setting up the channel (note according to applicant specification, page 4, lines 15-24: the invention utilizes GSM standard 04.18) the signaling message includes an identifier (a parameter) to indicate the presence of said spare field and communicating the user message (col. 2 L41-58, col. 3 L63 to col. 4 L67, col. 5 L49-67, fig. 2).

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lindsay in view of Ranta (hereinafter Lindsay-Ranta) in order to place the reply message in the spare field in a reply signaling message.

One of ordinary skilled in the art would have been motivated because it would have allowed the system to transmit information in an unoccupied part(s) of the signaling message (Ranta, col. 2 L13-25).

2. Claims 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay et al. (hereinafter Lindsay, US 6,301,242 B1) in view of Ranta (U. S. Patent No. 6,775,259 B1), and further in view of “Official Notice”.

As per claim 12, Lindsay-Ranta discloses the method of claim 11 as set forth above.

However, Lindsay-Ranta does not disclose the process wherein the mobile terminal receives a command and responsive to receiving the command, the mobile terminal reading the

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reply message from the dedicated memory, determining a status indicated by the reply message and if the status is positive, authorizing a payment to be made.

But, the process of receiving a command at the mobile terminal (e.g. retrieve or read command) and responsive to receiving the command, the mobile terminal reading the reply message from the dedicated memory, determining a status indicated by the reply message and if the status is positive, authorizing a payment to be made, is well known in the art. Official Notice is taken.

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lindsay-Ranta in order to receive a command at the mobile terminal to read the status of the sent message and authorize the payment if authenticated successfully.

One of ordinary skilled in the art would have been motivated because it would have enabled the user of the mobile terminal to track the status of the authentication and authorize a payment based on the status.

As per claim 20, Lindsay-Ranta discloses the method of claim 12 as set forth above.

However, Lindsay-Ranta does not disclose the process wherein the user message includes PIN associated with smart card, the determining includes determining whether the status indicates that the smart card was authorized, and the authorizing includes authorizing the payment to be made if the status indicates that the smart card is authorized.

But, authenticating PIN associated with a smart card, the determining including determining whether the status indicates that the smart card was authorized (by checking positive

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or negative ACK), and the authorizing including authorizing the payment to be made if the status indicates that the smart card is authorized, are well known in the art. Official Notice is taken.

Therefore, it would have been obvious to a person of ordinary skilled in the art at the time the invention was made to modify Lindsay-Ranta in order to authenticate the PIN associated with smart card.

One of ordinary skilled in the art would have been motivated because it would have enabled the user of the mobile terminal to track the status of the authentication and authorize a payment based on the status.

Additional References

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Owens et al., US 6,338,140 B1: Method and System for Validating subscriber identities in a communications network.
- b. Pohjakallio, US 5,502,721: Packet Data Transfer in a Cellular Radio System.
- c. Pettersson et al., US 6,304,595 B1: Mobile Telephone Modems.
- d. Hameleers et al., US 6,377,799 B1: Interworking function in an internet protocol based radio telecommunications network.
- e. Schiefer et al., US 5,884,175: Handover following in a mobile radio system.
- f. Clarke et al., US 5,550,914: Communications Signaling network apparatus.
- g. Rosenthal et al., U. S. Patent No. 5,737,701: Automatic Authentication System.
- h. Wallenius, U. S. Patent No. 6,466,786 B1: Call setup in Mobile Communications.

Conclusion

It should be noted that applicant has failed to seasonably challenge the Examiner's assertions of well known subject matter in the previous Office action(s) pursuant to the requirements set forth under MPEP §2144.03. A "seasonable challenge" is an explicit demand for evidence set forth by Applicant in the next response. Accordingly, the claim limitations the Examiner considered as "well known" in the first Office action are now established as admitted prior art of record for the course of the prosecution. See *In re Chevenard*, 139 F.2d 71, 60 USPQ 239 (CCPA 1943).

The teachings of the prior art shall not be restricted and/or limited to the citations by columns and line numbers, as specified in the rejection. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

In the case of amendments, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and support, for ascertaining the metes and bounds of the claimed invention.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAMAL B. DIVECHA whose telephone number is 571-272-5863. The examiner can normally be reached on Increased Flex Work Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KAMAL B DIVECHA/
Examiner, Art Unit 2451